EUROPEAN PATENT OF

## Patent Abstracts of Japan

**PUBLICATION NUMBER** PUBLICATION DATE

56103951 19-08-81

APPLICATION DATE

18-01-80

APPLICATION NUMBER

55003618

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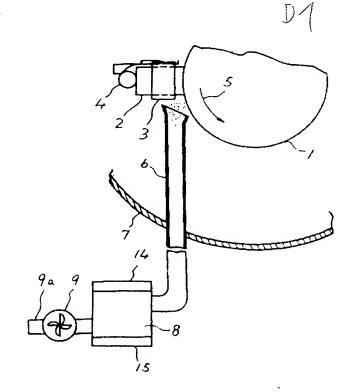
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H02K 13/00 H01R 39/58

TITLE

BRUSH ABRASION DETECTING

DEVICE



ABSTRACT :

PURPOSE: To detect a life and anomalous abrasion of the brush and remove powder of worn brush by a method wherein an opening of a duct for dust collection is provided near a current collecting means to be led to a light permeable filter, and a permeability of the light permeable filter is optically detected.

CONSTITUTION: The opening of the dust collecting dust 6 is located rearward the brush 2 in the sense of rotation 5 near a contact part of the brush 2 and a current collcting ring 1. The wear powders of the brush 2 which are sucked are let to a dust collecting chamber 8 having the filter with light permeability. The permeable filter is provided with a projector 14 and a light receiver 15 in parallel to continuously detect the permeability of the filter, thereby the abrasion degree of the brush 2 being detected. Whereby the life and anomalous wear of the brush 2 can be detected and and also insulation deterioration can be prevented without the inside of the current collecting chamber being contaminated by the wear powders of the brush 2.

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